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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,314	01/09/2002	Cecile Joubert	217798US2PCT	7416
22850	7590	04/09/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			AMARI, ALESSANDRO V	
			ART UNIT	PAPER NUMBER
			2872	

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/019,314

Applicant(s)

JOUBERT ET AL.

Examiner

Alessandro V. Amari

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 29-56 is/are pending in the application.
- 4a) Of the above claim(s) 29-43 and 53-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 44-47 and 49-52 is/are rejected.
- 7) ☒ Claim(s) 48 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/9/2002.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claims 29-43 and 53-56 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper dated 13 February 2004.

Applicant's election with traverse of Group II, claims 44-52 in Paper dated 13 February 2004 is acknowledged. The traversal is on the ground(s) that Groups I, II and III have not been shown to lack a shared special technical feature in that each group includes a claim that includes a document including a hologram. This is not found persuasive because the restriction clearly indicated that the claims lacked the special technical feature of the use of an optical modulator.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Objections***

2. Claim 48 is objected to because of the following informalities:

Regarding claim 48, the phrase "holographic material" lacks antecedent basis. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 44-47 and 49-52 are rejected under 35 U.S.C. 102(b) as being anticipated by Webster GB 2,254,166.

In regard to claim 44, Webster discloses (see Figures 1-8) a document security system, comprising a prerecorded or electrically controllable optical modulator (12, 19) in which an image of at least part of the document is recorded, said modulator configured to be combined with a layer of photosensitive material (1), at least one first light source configured to transmit a first reference wave (9, 18) to the layer of photosensitive material and a second incident wave onto said modulator and giving rise to a third object wave (8, 20) which is transmitted to the layer of photosensitive material in order to interfere with the reference wave in this layer of photosensitive material, and comprising in a path of the first wave or of the second wave means for including scrambling in the hologram recorded in the layer of photosensitive material as described on pages 2-4.

Regarding claim 45, Webster further discloses (see Figure 5) a mirror placed on a side opposite the layer of photosensitive material with respect to the modulator as shown in Figure 5 and as described in page 3, lines 25-32, this mirror receiving the reference wave after passing through the layer of photosensitive material and the modulator and reflecting this reference wave to give rise to the second wave which illuminates the modulator which transmits the third wave to the layer of photosensitive material, the reference and object waves being counter-propagating and perpendicular to planes of the modulator and of the photosensitive layer as shown in Figure 5 and as described in page 3, lines 25-34.

Regarding claim 46, Webster further discloses a second source (6) which is coherent like the first source and emitting the second wave, the first and the second source being located on each side of the modulator assembly and layer of photosensitive material as shown for example in Figures 2 and 3.

Regarding claim 47, Webster further discloses between the modulator and the layer of photosensitive material, an optical device (13) configured to image the modulator in a plane of the layer of photosensitive material as shown in Figure 3.

Regarding claim 49, Webster further discloses (see Figure 7) at least one additional spatial light modulator (24) not located in a plane of said optical modulator and configured to record, in the hologram, at least one additional image appearing, on reading, in a plane different from said image of the part of the document as shown in Figure 7 and as described in page 4, lines 6-11.

Regarding claim 50, Webster discloses (see Figures 2-8) wherein the additional image and the image of the part of the document are recorded at least one of different wavelengths (10) and different angles of incidence of the recording beams as described in page 2, lines 16-18.

Regarding claim 51, Webster discloses wherein the first reference wave and the third object wave are plane, coherent, and collinear waves as described in page 2, lines 5-32.

Regarding claim 52, Webster discloses wherein said means for inducing scrambling is placed at least substantially against the layer of photosensitive material as shown in Figures 2-8.

***Allowable Subject Matter***

5. Claim 48 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claim 48 is allowable over the prior art for at least the reason that the prior art fails to teach or reasonably suggest, "a beam splitter plate, the first source supplying the first reference wave to the beam splitter plate which retransmits this first wave to the layer of holographic material" as set forth in the claimed combination.

The prior art of record, Webster teaches a document security system with an optical modulator wherein said modulator configured to be combined with a layer of photosensitive material, and a first light source is configured to transmit a first reference wave to the layer of photosensitive material and a second incident wave onto said modulator and giving rise to a third object wave which is transmitted to the layer of photosensitive material. However, the prior art does not further teach a beam splitter plate, the first source supplying the first reference wave to the beam splitter plate which retransmits this first wave to the layer of photosensitive material and there is no motivation or teaching to modify this difference as derived.

***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Webster GB 2,196,443 teaches a document security system. Comprising an optical modulator as shown in Figure 1.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alessandro V. Amari whose telephone number is (571) 272-2306. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ava *ava*  
02 April 2004

  
MARK A. ROBINSON  
PRIMARY EXAMINER